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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/677,821	10/03/2000	Tetsuji Kishi	43889-984	5220

7590 07/01/2003

McDermott Will & Emery  
600 13th Street NW  
Washington, DC 20005-3096

EXAMINER

TRAN, TAM D

ART UNIT	PAPER NUMBER
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2676

DATE MAILED: 07/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/677,821

Applicant(s)

KISHI, TETSUJI

Examiner

Tam D. Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 –13 are rejected under 35 U.S.C. 102(b) as being anticipated by Keller James (PN 0247711).

2. In regard to claims 1, 2 Keller teaches a method and apparatus for providing a faster graphical representation of lines to be displayed from their endpoint data comprising: three points those are point 84 in the center (midpoint) of the line, and points 86, 88 in the center (midpoints) of the segments defined by segment sections SP1, SP2, SP3, SP4. See Fig.8 col.7 lines 25-35.

3. In regard to claims 3, 4, Keller teaches a method and apparatus for providing a faster graphical representation of lines to be displayed from their endpoint data wherein line has been divided into  $2^m$  segment, and the center of the line is  $dx/2$ ,  $dy/2$  from the end point. See col.6 line 33 – col.8 line 42.

4. In regard to claims 5, 8, 9, 11, 13, Keller teaches a method and apparatus for providing a faster graphical representation of lines to be displayed from their endpoint data, comprising: memory and buffer (first and second data storage means), addition and subtraction elements

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(adding means) for adding data from the memory, see col. 8 lines 10-55, dividing the line to  
be drawn into equal length segments. See col.3 lines 23 - 58.

5. In regard to claim 6, Keller teaches a method and apparatus for providing a faster graphical representation of lines to be displayed from their endpoint data wherein numbers are divided-by-two. In digital processing shifting the number to the right one bit is divide-by-two.

6. In regard to claims 7, 12, Keller teaches a method and apparatus for providing a faster graphical representation of lines to be displayed from their endpoint data wherein the processor repeatedly (iteration control mean) determines successive points in the line segment section, and calculation mean for calculating absolute values of difference between X coordinate and difference between Y coordinates. See col.11 lines 25-45.

7. In regard to claim 10, Keller teaches a method and apparatus for providing a faster graphical representation of lines to be displayed from their endpoint data, comprising: calculating means calculating the slope of the line, memory and buffer (first storage mean, second storage mean). See col.3 line 23 - col.4 line 56.

8. In regard to claims 14, 15, Keller teaches a method and apparatus for providing a faster graphical representation of lines to be displayed from their endpoint data, wherein the midpoint coordinate generating means generates the first midpoint before generating the second and third midpoints. See col.6 lines 43-47.

### ***Response to Arguments***

9. Applicant's arguments filed on 04/14/2003, have been fully considered but they are not persuasive.

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Applicant argues that the prior art does not teach the technique of drawing lines by generating the midpoints. However, examiner respectfully disagrees with the argument because on col.7 line 25 - col.8 lines 58, Keller discloses the technique of drawing lines by generating the center points (midpoints), on col.7 lines 25-35, the point 84 in the center (midpoint) of the line, and point 86, 88 in the center (midpoint) of the segments. As to claim 5, 11 and 13, on col.8 line 10-45, the center point is  $dx/2$ ,  $dy/2$  which read on divide-by-two means, on col.10 lines 45-50, showing the memory 12 (first storage mean), on col.11 lines 35-42, showing the buffer (second storage mean). For these reasons, the rejections are maintained.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tam D. Tran** whose telephone number is **703-305-4196**. The examiner can normally be reached on MON-FRI from 8:30 – 5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Matthew Bella** can be reached on **703-308-6829**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Tam Tran

*TT*

Examiner

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*Jeffrey A. Bruns*  
JEFFREY A. BRUNS  
PRIMARY EXAMINER